of groups of species (Figures 3 and 4). One of the criteria for the design of these graphs was the relative frequency of each species in the "coldest samples" or in the "warmest" ones or in both.

July 1973

In Figure 5 (a, b and c), curves corresponding to stations 1 through 22 are presented. The graphs, when grouped, present a high similarity between them, but this tendency is not true between groups. Graphs 5a and 5c are almost a mirror image of one another while 5b is somewhere in between.

Stations of group 5a (see references to Figures 5 and 7) had exclusively subantarctic fauna and are located, with the exception of number 6, in the Malvinas current or in its vicinity (see Figure 7). Station number 6 was taken from a spot of subantarctic water. Notice that in this group the higher values of the index correspond to the areas of lower temperature (shaded areas in Figure 5a).

The stations represented by Figure 5c were taken in a subtropical-subantarctic water mixture with a slight predominance of the first (notice the drops in the curves at lower temperatures). Their distribution is not regular (see Figure 7) and is due to the presence of spots or "tongues" of waters of this type or both.

Group 5b also includes stations with mixed fauna , but in this case the predominance corresponds to the subantarctic elements. The group is characterized by traces intermediate between 5a and 5c. The distribution is not regular.

All the above is corroborated when Figure 5 is compared with the data of Table 3.

(← on facing page)

Figure 6

Graphical representation of similarity indices among samples taken in January 1974

a: stations 6, 7 and 12
b: stations 4, 9, 10, 11, 13, 14 and 15
c: stations 5 and 8
d: stations 1, 2, and 3
in: index
st: stations

The shaded zones correspond to those stations where the temperature was less than 18.6° C

January 1974

In this case (Figures 6a–d; Table 3) all the stations are distributed in 4 groups. The first (Figure 6a) corresponds to three stations effected in purely subantarctic waters and the last (Figure 6d) to three of subtropical waters. The other two groups (Figures 6b and 6c) correspond to mixed fauna , c being more warm tolerant than b (in this last group stations 4 and 10 were the more affected by cold waters).

Table 3

Comparative data with respect to the groups of stations found (for the figures included in the last column see note to Figure 2)

Cruise	Group	Type of water	Summation averages of the respective indices		Average temperature (°C) in the respective samples	Average of subtropical spp./ subantarctic spp. index from the respective stations
			With respect to the samples of group a	With respect to the samples of group c (or d)		
July 1973	a	subantarctic	—	45	8.3	0
	b	mixed	60	59	14.9	0.68
				mixed	45	—
January 1974	a	subantarctic	—	1.77	13.9	0
	b	mixed	45	28	16.8	0.62
	c	mixed	24	29	19.5	1.5
	d	subtropical	1.77	—	22.4	9